Darstellung und Strukturelle Charakterisierung von cis- und trans-Dicyclohexyl-3,3',4,4'-tetracarbonsäure-tetramethylestern

Preparation and Structural Characterization of cis- and trans-Tetramethyl Dicyclohexyl-3, 3', 4, 4'-tetracarboxylates

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Tetramethyl Dicyclohexyl-3,3',4,4'-tetracarboxylates

In the catalytic hydrogenation of tetramethyl biphenyl-3,3',4,4'-tetracarboxylate, tetramethyl dicyclohexyl-3,3',4,4'-tetracarboxylates were obtained, from which we have isolated cis isomers as crystals. The base-catalyzed isomerization afforded the trans isomers. The structure of the products isolated was determined by single-crystal x-ray diffraction, which clearly reveals the axial and equatorial positions of the methoxycarbonyl group. The structures in solution are supported by \(^1\)H and \(^13\)C NMR data, and also by two-dimensional COSY techniques.